

ABSTRACT OF THE DISCLOSURE

Notification of lapse information of a public key certificate from a PKI directory server to a PKI directory client can be efficiently performed. Certificate authority information in a certificate authority structure is made to correspond to a container entry, and entity information is made to correspond to a leaf entry, and the certificate authority structure is assigned to a directory tree. A latest public key certificate itself or its obtaining method and a serial number are provided as attributes of each entry. If a certain certificate is lapsed and a certificate is newly issued, the newly issued certificate and its serial number are stored into the entry. After the elapse of a predetermined time, the certificate is put into a certain URL and the certificate stored in the entry is replaced with URL information. On the reception side, a filtering mask is set on the basis of a certificate pass for obtaining the necessary certificate. A directory structure transmitted from the transmission side is selectively received by the filtering mask and the directory on the reception side is changed. A directory tree in which the URL information and the serial number have been stored is repetitively transmitted from the transmission side. On the

reception side, only the entries selected by the filtering mask are updated. The reference to the latest public key certificate is distributed.